

BOOK REVIEWS

Conservation: The Long View

Conservation of Renewable Natural Resources. A symposium by twelve authors. The University of Pennsylvania Press, Philadelphia. Pp. 200. 1941. \$2.50.

This interesting and important volume is divided into three sections, the first being: "The natural vegetation of the United States as a guide to current agricultural and forestry practice." Following a few introductory paragraphs by Raphael Zon, we wade into the problem. Gustaf A. Pearson discusses "What forest trees tell about climate and soil," and Homer L. Shantz discourses on "The original desert shrub vegetation of the United States as a guide to present-day agricultural practice." These two, as we might expect, are excellent journeyman accounts of the problem, even if somewhat static in their viewpoint. It remains for William S. Cooper, the ecologist, to approach the problem in a dynamic manner in his "Man's use and abuse of native vegetation: the lessons of the past and the prospects for the future."

The second section, "Climatic cycles in relation to the theory and practice of conservation," has its quartet of authors. A. E. Douglass, as one would imagine, gives a rather lengthy discussion of "Dendrochronology and the studies in 'Cyclics.'" It is perhaps overburdened with methods, but is a good review of this work. The chapter by Charles G. Abbot on "Periodicities in solar variation reflected in weather," while brief, reiterates our knowledge that "weather" does come in cycles of varying length. Paul B. Sears, under the topic of "Conservation and changing environment," emphasizes perhaps as much as any of the authors that if man is to control his environment, if he is to hold the soil at a necessary level of productivity, he must first learn to control the greatest despoiler of the land—man himself. But he further points out that agricultural activities, even under the best of conditions, introduce a chain of events which make the necessary conservation of soil very difficult.

The closing chapter of this section, "Climatic pulsations and an ozone hypothesis of libraries and history," is by Ellsworth Huntington. Although the major portion of the chapter is taken up with an exposition of his "ozone hypothesis," proving only that

peoples of the higher latitudes are more stimulated and intellectually energetic than those of lower latitudes due to a periodically greater amount of atmospheric ozone, the disjointed first part is a restatement of his well-known and certainly obvious contention that movements of population must follow the great pulsations of climate. Perhaps being more a geographer than a prophet, Huntington has not asked but has answered the question: If the climate of an agricultural region changes, so that it no longer is able to support a large population, what are the people living there going to do about it? In the previous chapter, and anticipating Huntington, Sears intimates that much of the present wasteland in areas once heavily populated can be blamed on the unwillingness of the people to practice adequate methods of conservation—that a fertile land is soon laid waste by incorrect cropping methods. It is the opinion of this reviewer, based on his own observations in sub-marginal agricultural regions, that both forces—sometimes working concurrently—have been operative in the deterioration of agricultural land.

The last section of the volume is entitled "The administrative task of conservation—private and public." Again, four topics are discussed. These are: "On total conservation" by Morris L. Cooke; "Natural resources and the States" by Samuel T. Dana; "Federal responsibility in total conservation" by Milton S. Eisenhower; and "The forest problem can be solved by increased production" by Julian F. McGowin.

McGowin, a commercial lumberman with a sympathetic view toward conservation—both from a social and business standpoint—takes the stand that we have adequate forest resources; that all we need to do is to put them to use. He follows this by a plea for more government direction of conservation, especially fire protection. Dana closes his discussion with the pointed question: "We readily spend billions of dollars to prevent our natural resources from falling into the hands of a foreign enemy. Have we not the vision to spend a far smaller amount in assuring their perpetuation in the ownership of our own people, with ample opportunity for individual initiative under a democratic system of government? Eisenhower, in his discussion, holds that the responsibility for conservation lies with the Federal Government, pointing out a thing which many individuals do not realize: that in the last several

decades the United States has shifted from a debtor to a creditor nation. This has vastly changed the economy of other nations and has forced us into a new economic program. This, then, requires a national viewpoint and its natural consequence, Federal control of resources.

Cooke, in his chapter on Total Conservation, presents some interesting tables showing just what erosion is costing the people of the United States per year. In 1940 alone, the cost was nearly four billion dollars, of which amount more than three-fourths can be laid to the "loss of plant food constituents and plant nutrients contained in three billion tons of eroded topsoil and subsoil." Viewing this alarming rate of loss of our fertile land, so necessary to basic agriculture, he says: "It has been estimated that the United States has only seventy-five to one hundred years to go as a virile nation unless brave remedial measures are set up. Our country has a fatal earth disease. It is actually bleeding to death through the erosion of its soils. The longer healing measures are delayed, the more difficult and problematical becomes the cure." He closes with the remark, "It is reassuring to know that the task of rehabilitation is probably not beyond our means and our power."

Frankly, this reviewer, even at the risk of being called a cynic, is forced to the view that, because of a deteriorating agriculture, America faces an uncertain future. We have already been too careless of the magnificent heritage of this land. We cannot return to the abundance of the past merely by a discussion of the problem. It will require a tightening of our belts, a uniting of the whole country to the job of holding on to what we have; it will take more than the passing of a law. It means that there must be a hardening of the will of all the people to the task ahead if democracy, as a way of life, is to exist at all in this, our land. In a democracy, this will to exist as free men is not up to the government, it is up to the people, who *are* the government.

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